Idaho Department of Environmental Quality

Draft §401 Water Quality Certification

April 14, 2017

404 Permit Application Number: NWW-2016-589-B02 Santa Creek Bridge

Applicant/Authorized Agent: Damon Allen, Idaho Transportation Department 600 W. Prairie Ave Coeur d'Alene ID

Project Location: Latitude 47º 08' 59.63"N Longitude 116º 32' 15.31"W Located on State Highway 6 at milepost 32.483, approximately 3.7 miles east of Emida.

Receiving Water Body: Santa Creek

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. Section 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review activities receiving Section 404 dredge and fill permits and issue water quality certification decisions.

Based upon its review of the joint application for permit received on March 30, 2017 and supplemental information received on April 10, 2017, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the activity will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Project Description

The current 76 foot long 24.8 foot wide bridge will be replaced with a 96 foot long by 42 foot wide structure. This is a design-build contract that has not yet been awarded so specific details on how the contractor choses to construct it are not yet available. In general, the Santa Creek Bridge is a three span structure with two piers below the ordinary high water mark. The bridge will be replaced with a clear span (one span) bridge structure. The in-stream work on this project will be limited to the demolition of the existing piers down to the approximate stream bed elevation. The piers are positioned near the low water edge on both sides of the stream and are partially inundated. In this situation ITD expects it will be possible to adequately isolate the pier demolition work by installing cofferdams or silt curtains lateral to the stream flow along the outside of the piers and tied into the streambanks upstream and downstream of the pier. Shallow depths are anticipated so suitable cofferdam materials could be sandbags or a water

bladder. Given that piers are to be demolished down to or near the streambed, dewatering would not be necessary to facilitate demolition. That said, turbidity could be adequately controlled within the confines of a properly sealed floating silt curtain also.

Work will occur during low pool. For soil stabilization, ITD anticipates the installation of rock riprap in scour prone areas near the proposed abutments. Long term soil stabilization will be accomplished by hydraulically applied wood fiber mulch and native grass seed along the roadway embankment and other disturbed areas. Sediment control will be accomplished with the installation of silt fence along the project perimeter below all disturbed slopes. All BMPs will be installed in accordance with ITD standard drawings.

Debris and construction fills will be removed from the dewatered streambed and cofferdam area prior to removal of the containment. If dewatering is necessary for construction of the new abutments, water will be discharged onto land within a straw bale corral or similar arrangement and infiltrated.

Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

The primary pollutants of concern for this project are sediment and temperature. As part of the Section 401 water quality certification, DEQ is requiring the applicant comply with various

conditions to protect water quality and to meet Idaho WQS, including the water quality criteria applicable to sediment and temperature.

Receiving Water Body Level of Protection

This project is located on Santa Creek within the St. Joe Subbasin assessment unit (AU) ID17010304PN010_03 (Santa Creek source to mouth). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning and primary contact recreation. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

According to DEQ's 2012 Integrated Report, this AU is not fully supporting its cold water aquatic life and salmonid spawning uses. Causes of impairment include sediment and temperature. As such, DEQ will provide Tier 1 protection (IDAPA 58.01.02.051.01) for the aquatic life uses. The contact recreation beneficial use is unassessed.

The only pollutants of concern associated with this project are sediment and temperature, but sediment and temperature not relevant to recreational uses; therefore, it is unnecessary for DEQ to conduct a Tier II review for this AU because this project will not create impacts that could affect the recreation use.

Protection and Maintenance of Existing Uses (Tier I Protection)

As noted above, a Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The numeric and narrative criteria in the WQS are set at levels that ensure protection of existing and designated beneficial uses.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. Once a TMDL is developed, discharges of causative pollutants shall be consistent with the allocations in the TMDL (IDAPA 58.01.02.055.05). Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.055.04).

During the construction phase, the applicant will implement, install, maintain, monitor, and adaptively manage best management practices (BMPs) directed toward reducing erosion and minimizing turbidity levels in receiving water bodies downstream of the project. In addition, permanent erosion and sediment controls will be implemented, which will minimize or prevent future sediment contributions from the project area. As long as the project is conducted in accordance with the provisions of the project plans, Section 404 permit, and conditions of this certification, then there is reasonable assurance the project will comply with the state's numeric and narrative criteria. These criteria are set at levels that protect and maintain existing and designated beneficial uses. In addition, the project will be consistent with the *St. Maries River Subbasin Assessment and Total Maximum Daily Loads and the St. Joe River Subbasin Temperature TMDL Addendum*. As described in detail under the Project Description section, sediment control measures will be used for in-water work and erosion control measures will be

used on disturbed ground to ensure no sediment is added to the stream. There is only a small fringe of shrubs that will be removed for the construction of the new wider and longer bridge deck which will not contribute additional thermal loading to Santa Creek. Salmonid spawning will be protected by using BMPs that assure there will be no addition of sediment to the stream during construction, by cleaning up any debris or fill in the dewatered areas, and placing clean riprap in areas subject to scour. The channel will also be provided with a wider floodway under the bridge without piers so a more natural streambed is created.

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

General Conditions

1. This certification is conditioned upon the requirement that any modification (e.g., change in BMPs, work windows, etc.) of the permitted activity shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401. Such modifications may not be implemented until DEQ has determined whether additional certification is necessary.
2. DEQ reserves the right to modify, amend, or revoke this certification if DEQ determines that, due to changes in relevant circumstances—including without limitation, changes in project activities, the characteristics of the receiving water bodies, or state WQS—there is no longer reasonable assurance of compliance with WQS or other appropriate requirements of state law.
3. If ownership of the project changes, the certification holder shall notify DEQ, in writing, upon transferring this ownership or responsibility for compliance with these conditions to another person or party. The new owner/operator shall request, in writing, the transfer of this water quality certification to his/her name.
4. A copy of this certification must be kept on the job site and readily available for review by any contractor working on the project and any federal, state, or local government personnel.
5. Project areas shall be clearly identified in the field prior to initiating land-disturbing activities to ensure avoidance of impacts to waters of the state beyond project footprints.
6. The applicant shall provide access to the project site and all mitigation sites upon request by DEQ personnel for site inspections, monitoring, and/or to ensure that conditions of this certification are being met.
7. The applicant is responsible for all work done by contractors and must ensure the contractors are informed of and follow all the conditions described in this certification and the Section 404 permit.

Fill Material

8. Fill material subject to suspension shall be free of easily suspended fine material. The fill material to be placed shall be clean material only.

9. Placement of fill material in existing vegetated wetlands shall be minimized to the greatest extent possible.
10. Excavated or staged fill material must be placed so it is isolated from the water edge or wetlands and not placed where it could re-enter waters of the state uncontrolled.

Erosion and Sediment Control

11. Permanent erosion and sediment control measures shall be installed in a manner that will provide long-term sediment and erosion control to prevent excess sediment from entering waters of the state.
12. At a minimum, BMPs must be inspected and maintained daily during project implementation.
13. BMP effectiveness shall be monitored during project implementation. BMPs shall be replaced or augmented if they are not effective.
14. All construction debris shall be properly disposed of so it cannot enter waters of the state or cause water quality degradation.
15. Disturbed areas suitable for vegetation shall be seeded or revegetated to prevent subsequent soil erosion.
16. Sediment from disturbed areas or able to be tracked by vehicles onto pavement must not be allowed to leave the site in amounts that would reasonably be expected to enter waters of the state. Placement of clean aggregate at all construction entrances or exits and other BMPs such as truck or wheel washes, if needed, must be used when earth-moving equipment will be leaving the site and traveling on paved surfaces.

Turbidity

17. Sediment resulting from this activity must be mitigated to prevent violations of the turbidity standard as stipulated under the Idaho WQS (IDAPA 58.01.02). *Any violation of this standard must be reported to the DEQ regional office immediately.*
18. All practical BMPs on disturbed banks and within the waters of the state must be implemented to minimize turbidity. Visual observation is acceptable to determine whether BMPs are functioning properly. If a plume is observed, the project may be causing an exceedance of WQS and the permittee must inspect the condition of the projects BMPs. If the BMPs appear to be functioning to their fullest capability, then the permittee must modify the activity or implement additional BMPs (this may also include modifying existing BMPs).
19. Containment measures such as silt curtains, geotextile fabrics, and silt fences must be implemented and properly maintained to minimize stream sedimentation and resulting turbidity.
20. Debris and construction fills shall be removed from the dewatered streambed and cofferdam area prior to removal of the containment. If dewatering is necessary for construction of the new abutments, water shall be discharged onto land within a straw bale corral or similar arrangement and infiltrated.

In-water Work

21. Work in open water is to be kept at a minimum and only when necessary. Equipment shall work from an upland site to minimize disturbance of waters of the state. If this is not

practicable, appropriate measures must be taken to ensure disturbance to the waters of the state is minimized.

22. Construction affecting the bed or banks shall take place only during periods of low flow.
23. Fording of the channel is not permitted. Temporary bridges or other structures shall be built if crossings are necessary.
    a. Temporary crossings must be perpendicular to channels and located in areas with the least impact. The temporary crossings must be supplemented with clean gravel or treated with other mitigation methods at least as effective in reducing impacts. Temporary crossings must be removed as soon as possible after the project is completed or the crossing is no longer needed.
24. Heavy equipment working in wetlands shall be placed on mats or suitably designed pads to prevent damage to the wetlands.
25. Activities in spawning areas must be avoided to the maximum extent practicable.
26. Work in waters of the state shall be restricted to areas specified in the application.
27. Measures shall be taken to prevent wet concrete from entering into waters of the state when placed in forms and/or from truck washing.
28. Stranded fish found in dewatered segments should be moved to a location (preferably downstream) with water.
29. To minimize sediment transport, stream channel or stream bank stabilization must be completed prior to returning water to a dewatered segment.

Pollutants/Toxics

30. The use of chemicals such as soil stabilizers, dust palliatives, sterilants, growth inhibitors, fertilizers, and deicing salts during construction and operation should be limited to the best estimate of optimum application rates. All reasonable measures shall be taken to avoid excess application and introduction of chemicals into waters of the state.

Vegetation Protection and Restoration

31. Disturbance of existing wetlands and native vegetation shall be kept to a minimum.
32. To the maximum extent practical, staging areas and access points should be placed in open, upland areas.
33. Fencing and other barriers should be used to mark the construction areas.
34. If authorized work results in unavoidable vegetative disturbance, riparian and wetland vegetation shall be successfully reestablished to function for water quality benefit at pre-project levels or improved at the completion of authorized work.

Management of Hazardous or Deleterious Materials

35. Petroleum products and hazardous, toxic, and/or deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of waters of the state. Adequate measures and controls must be in place to ensure that those materials will

not enter waters of the state as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third-party activities.

36. Vegetable-based hydraulic fluid should be used on equipment operating in or directly adjacent to the channel if this fluid is available.
37. Daily inspections of all fluid systems on equipment to be used in or near waters of the state shall be done to ensure no leaks or potential leaks exist prior to equipment use.
38. Equipment and machinery must be removed from the vicinity of the waters of the state prior to refueling, repair, and/or maintenance.
39. Equipment and machinery shall be steam cleaned of oils and grease in an upland location or staging area with appropriate wastewater controls and treatment prior to entering a water of the state. Any wastewater or wash water must not be allowed to enter a water of the state.
40. Emergency spill procedures shall be in place and may include a spill response kit (e.g., oil absorbent booms or other equipment).
41. In accordance with IDAPA 58.01.02.850, in the event of an unauthorized release of hazardous material to state waters or to land such that there is a likelihood that it will enter state waters, the responsible persons in charge must
    a. Make every reasonable effort to abate and stop a continuing spill.
    b. Make every reasonable effort to contain spilled material in such a manner that it will not reach surface or ground waters of the state.
    c. Call 911 if immediate assistance is required to control, contain, or clean up the spill. If no assistance is needed in cleaning up the spill, contact the Coeur d'Alene Regional Office at 208-769-1422 / 877-370-0017 during normal working hours or Idaho State Communications Center after normal working hours (1-800-632-8000). If the spilled volume is above federal reportable quantities, contact the National Response Center (1-800-424-8802).
    d. Collect, remove, and dispose of the spilled material in a manner approved by DEQ.

Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the "Rules of Administrative Procedure before the Board of Environmental Quality" (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to June Bergquist, Coeur d'Alene Regional Office, at (208) 666-4605 or via email at june.bergquist@deq.idaho.gov.

DRAFT

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